WE CLAIM:

1. A method for hydrolyzing α-galactose bonds comprising:

contacting a compound having an α-galactose bond with an effective amount of an enzyme having at least a 70% amino acid identity to amino acid sequence set forth in SEQ ID NO: 4.

2. The method according to claim 1 wherein the enzyme has at least 90% amino acid identity to the amino acid sequence set forth in SEQ ID NO: 4.

3. The method according to claim 1 wherein the enzyme comprises a sequence of amino acids identical to amino acids 1 to 364 of SEQ ID NO:4.

4. The method according to claim 1 wherein the enzyme has the amino acid sequence as set forth in SEQ ID NO: 4.

5. The method according to claim 1 wherein the enzyme is recombinantly produced.

6. The method according to claim 1 wherein the compound having the α-galactose bond is raffinose.

7. The method according to claim 6 wherein the α-galactose bond is in raw beet sugar.

8. The method according to claim 1 wherein the compound is raffinose, stachyose, verbascose, or a combination thereof.

9. The method according to claim 8 wherein the compound is contained in a member of the lentil or bean family, or a combination thereof.

10.   The method according to claim 1 wherein the contacting is at a temperature of about 85° C.

11.   The method according to claim 1 wherein the contacting is at a pH of about 9.5.

12.   The method according to claim 1 wherein the contacting is at a temperature of about 85° C and a pH of about 9.5.

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